ORAL ARGUMENT NOT YET SCHEDULED
Case No. 20-1424

In the United States Court of Appeals for the District of Columbia Circuit

CITADEL SECURITIES LLC,
Petitioner,

v.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION,
Respondent,

INVESTORS EXCHANGE LLC,
Intervenor.

ON PETITION FOR REVIEW OF A FINAL ORDER OF THE SECURITIES AND EXCHANGE COMMISSION

INITIAL BRIEF FOR PETITIONER CITADEL SECURITIES LLC

February 2, 2021

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to D.C. Circuit Rules 15(c)(3) and 28(a)(1), counsel for Petitioner certifies as follows:

1. Parties, Intervenors, and Amici Curiae

The parties to this Petition for Review are Petitioner Citadel Securities LLC, Respondent United States Securities and Exchange Commission (the "Commission"), and Intervenor Investors Exchange LLC.

Amicus Curiae is Andrew N. Vollmer.

2. Rulings Under Review

Petitioner seeks review of the final order of the Commission, dated August 26, 2020, Release No. 34-89686, File No. SR-IEX-2019-15, titled "Self-Regulatory Organizations; Investors Exchange LLC; Order Approving a Proposed Rule Change to Add a New Discretionary Limit Order Type Called D-Limit," which was filed on October 16, 2020. (ECF 1867322 at Exhibit A.)

3. Related Cases

Petitioner is not aware of any related cases.

CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and this Court's Rule 26.1, Petitioner Citadel Securities LLC states that it is a limited liability company and has not issued shares or debt securities to the public. Petitioner does not have any parent companies, subsidiaries, or affiliates that have issued shares or debt securities to the public. Petitioner is a leading market maker in the United States equity markets.

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[*] Authorities on which Petitioner principally relies are denoted with asterisks.

Other

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Approval Order	Investors Exchange LLC; Order Approving a Proposed Rule Change to Add a New Discretionary Limit Order Type Called D-Limit, Exchange Act Rel. No. 89,686 (Aug. 26, 2020), 85 Fed. Reg. 54,438 (Sept. 1, 2020) (Doc. 5)†
CboeEDGA	Cboe EDGA Exchange, Inc.
CboeEDGA Disapproval Order	Cboe EDGA Exchange, Inc.; Order Disapproving Proposed Rule Change to Introduce a Liquidity Provider Protection Delay Mechanism on EDGA, Exchange Act Rel. No. 88,260 (Feb. 21, 2020), 85 Fed. Reg. 11,425 (Feb. 27, 2020)
CboeEDGA Proposal	Cboe EDGA Exchange, Inc.; Notice of Filing of a Proposed Rule Change to Introduce a Liquidity Provider Protection on EDGA, Exchange Act Rel. No. 86, 168 (June 20, 2019), 84 Fed. Reg. 30,282 (June 26, 2019)
Citadel	Citadel Securities LLC
Commission	Securities and Exchange Commission
CQI	Crumbling Quote Indicator
D-Limit Order	Discretionary-Limit Order Type
IEX	Investors Exchange LLC
IEX Exchange Approval Order	In the Matter of the Application of Investors' Exchange, LLC for Registration as a National Securities Exchange—Findings, Opinion, and Order

† Documents listed in Respondent's Certificate Listing and Describing the Documents in the Record Before the Securities and Exchange Commission, filed with the Court on December 4, 2020 (ECF 1874367), are cited by document number and original document page number.

	of the Commission, Exchange Act Rel. 78,101 (June 17, 2016), 81 Fed. Reg. 41,141 (June 23, 2016)
Proposal	Investors Exchange LLC; Notice of Filing of Proposed Rule Change to Add a New Discretionary Limit Order Type, Exchange Act Rel. No. 87,814 (Dec. 20, 2019), 84 Fed. Reg. 71,997 (Dec. 30, 2019) (Doc. 1)
ISO	Intermarket Sweep Order
NBB	National Best Bid
NBO	National Best Offer
NBBO	National Best Bid or Offer
Protected Quotation	Automated and immediately accessible displayed liquidity reflecting the national best bid or offer for a security
Speedbump	Artificial 350-microsecond delay on all electronic data signals to IEX imposed through approximately 38 miles of coiled fiber-optic cable connecting IEX's computer servers to communication lines

PRELIMINARY STATEMENT

This case involves a decision by the Securities and Exchange Commission in which the Commission abdicated its statutory responsibility to carefully scrutinize a rule proposal by a national securities exchange. The Commission overlooked inaccuracies and omissions in the exchange's filing, disregarded contradictory data in the record, and failed to conduct its own independent analysis when approving a rule that will harm myriad market participants.

At issue is a rule that, by design, unfairly tilts the playing field in favor of those posting orders on the exchange to the detriment of those seeking to trade with such orders. The rule allows the exchange to reprice *posted* orders to buy or sell securities, while intentionally delaying *inbound* orders seeking to trade with the posted orders at their displayed prices. By the time inbound orders are permitted to proceed, the new price is worse for the party seeking to trade.

To put it in practical terms, imagine a grocery store that has deliberately installed extra-long conveyor belts on its checkout lines. After you've committed to buy your items at the advertised price by placing them on the belt, the store uses the extra time required to traverse the belt to determine whether any item that was available at the same price at competitors' stores has sold out. If so, the store's computers quickly raise its own price *before* your item reaches the cashier. You can either pay the higher price or try to find the item elsewhere.

The Commission approved the proposed rule allowing the exchange to operate in exactly that manner, but the Commission failed to conduct anything remotely resembling the reasoned decisionmaking required by the Administrative Procedure Act. The Commission concluded that the rule did not (i) unfairly discriminate against parties seeking to execute against the original posted price, or (ii) burden competition among market participants, adopting wholesale the exchange's assertion that its proposed rule was "narrowly tailored" to discourage a particular purported "disfavored" trading strategy. This appeal does not turn on whether that strategy is rightly disfavored (although neither the exchange nor the Commission offered any systematic analysis that would justify such sweeping discrimination). Rather, this appeal focuses on the utter lack of substance underlying the Commission's central conclusion that the proposed rule is "narrowly tailored" to target it.

The Commission accepted at face value, and failed to make its own independent determination regarding, the exchange's unsupported claim that the mere correlation between certain price changes and increased trading volume must be caused by the disfavored trading strategy, rather than by any number of other strategies or market forces. The Commission never considered other equally plausible causes of such price changes or the numerous other reasons why other

market participants' trades—including trades by "ordinary" investors—coincide with price fluctuations.

Petitioner also demonstrated that the exchange's initial analysis had grossly mischaracterized Petitioner as a firm trading only its own capital, when in actuality more than 50% of Petitioner's trading activity on the exchange was on behalf of retail investors that could be harmed by the proposal. Informed of this blatant error, the exchange simply jettisoned Petitioner's trading activity from its "analysis." If a new drug is introduced to treat a disease, but causes adverse side effects for a significant number of patients who receive it, one may not just ignore the adversely affected patients when evaluating whether the drug is safe and effective. Yet the Commission accepted the exchange's illogical response without scrutiny.

Worse still, the Commission flat-out ignored data that refuted the exchange's inaccurate assumptions. Most conspicuously, Petitioner submitted data showing that it transmitted a significant number of orders to IEX on behalf of retail investors during times when the exchange sought to employ its repricing power. Petitioner thus demonstrated that retail investors would be harmed by the proposed rule—to say nothing of numerous other types of market participants who would be harmed as well. Although the exchange admitted that it had not analyzed the proposal's effect on retail investors, the Commission did not deem it necessary to make that determination for itself.

When the Commission did briefly address the rule's acknowledged harmful effects on other market participants, it merely assumed them away. The Commission declared that market participants could adopt routing strategies to try to avoid harmful repricing. But the Commission did not explain how that would happen in the real world or examine the potential adverse consequences of attempting to do so.

What is more, the Commission rejected a substantially identical proposal by a different exchange just months before approving this one. The Commission's proffered distinctions between the two proposals do not hold water; both use an intentional delay to facilitate repricing that is harmful to all types of inbound orders (including those of retail investors) seeking to trade with displayed prices. And the Commission's reasoning in rejecting the prior proposal is directly contrary to the reasoning it relied upon here.

Adding insult to these injuries, the Commission erroneously held that posted orders subject to automatic repricing during the delay would qualify for significant regulatory protections that drive inbound order flow to the exchange, even though those regulations are premised on the posted price being "automatically and immediately" executable. Respectfully, this case illustrates precisely why this Court demands that rulemaking agencies "show [their] work," rather than merely announce conclusions that accord with their policy preferences. *City of Holyoke Gas & Elec. Dep't v. FERC*, 954 F.2d 740, 743 (D.C. Cir. 1992).

JURISDICTIONAL STATEMENT

Petitioner submits this brief in support of its petition for review of the Commission's final order, dated August 26, 2020, Release No. 34-89686, File No. SR-IEX-2019-15, titled "Self-Regulatory Organizations; Investors Exchange LLC; Order Approving a Proposed Rule Change to Add a New Discretionary Limit Order Type Called D-Limit" ("Approval Order") (Doc. 5). The proposed rule change was submitted by the Investors Exchange LLC ("IEX") and published as Release No. 34-87814 (Dec. 20, 2019), 84 Fed. Reg. 71,997 (Dec. 30, 2019) ("Proposal") (Doc. 1). The Commission issued the Approval Order pursuant to Section 19(b)(2) of the Securities Exchange Act of 1934 ("Exchange Act"), 15 U.S.C. § 78s(b)(2). This petition was filed on October 16, 2020; this Court has jurisdiction under Section 25(a)(1) of the Exchange Act, 15 U.S.C. § 78y(a)(1).

STANDARD OF REVIEW

This Court must set aside agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," or that is "unsupported by substantial evidence." 5 U.S.C. § 706(2)(A), (E); 15 U.S.C. § 78y(a)(4).

A Commission decision approving a proposal that violates the Exchange Act must be set aside as not in accordance with law. *See SEC v. Sloan*, 436 U.S. 103, 116-19 (1978); 15 U.S.C. § 78s(b)(2)(C)(i). A proposal by a national securities exchange is consistent with the Exchange Act only if it: (1) does not permit unfair

discrimination among customers, issuers, brokers, or dealers; (2) does not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act; (3) promotes just and equitable principles of trade; and (4) protects investors and the public interest. 15 U.S.C. § 78f(b)(5), (8).

An agency's decision is arbitrary and capricious if the agency "[did not] examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made," "entirely failed to consider an important aspect of the problem," or "offered an explanation for its decision that runs counter to the evidence before the agency." *Motor Vehicle Mfgs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). "Put differently, to survive arbitrary and capricious review, the [agency] must show that it engaged in reasoned decisionmaking." *Am. Fed. of Gov't Employees, AFL-CIO, Loc. 1929 v. Fed. Labor Rels. Auth.*, 961 F.3d 452, 456-57 (D.C. Cir. 2020).

For agency action to be supported by "substantial evidence," the Commission must articulate a reasoned explanation for its decision. *See Motor Vehicle Mfgs. Ass'n*, 463 U.S. at 43. The Commission must make its own "findings and determinations" and may not "abdicate[] that responsibility" to the self-regulatory organization. *Susquehanna Int'l Grp., LLP v. SEC*, 866 F.3d 442, 446-47 (D.C. Cir. 2017). Merely "'[s]tating that a factor was considered'—or found—'is not a substitute for considering' or finding it." *Id.* at 446 (quoting *Gerber v. Norton*, 294

F.3d 173, 185 (D.C. Cir. 2002)). The Commission must also afford adequate consideration to every reasonable alternative presented for its consideration, *Pub. Citizen v. Steed*, 733 F.2d 93, 103-04 (D.C. Cir. 1984), and respond to all "relevant" and "significant" public comments, *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 n.58 (D.C. Cir. 1977).

STATEMENT OF ISSUES PRESENTED FOR REVIEW

1. Whether the Commission lacked substantial evidence and acted arbitrarily and capriciously in concluding that the Proposal was "narrowly tailored" to avoid broadly harming market participants—despite the Commission's failure to consider specific data showing that the Proposal's asymmetric operation consistently harmed retail investors—and therefore did not impose unfair discrimination or burden competition, in violation of Sections 6(b)(5) and 6(b)(8) of the Exchange Act, 15 U.S.C. § 78f(b)(5), (b)(8).

2. Whether the Commission's approval of the Proposal was arbitrary and capricious in light of the Commission's rejection of a substantially identical rule proposed by another exchange several months earlier.

3. Whether the Commission's conclusion that a D-Limit order posted on IEX is a "protected quotation," such that broker-dealers may be required to route trades to IEX, was arbitrary and capricious in light of (a) the Commission's failure to analyze whether the Proposal met the regulatory requirements under

17 C.F.R. § 242.600, *et seq*., or (b) the Proposal's incompatibility with those requirements.

STATEMENT OF THE CASE

As principally relevant here, trading on securities exchanges consists of two sides: (1) those who *post* orders to buy or sell securities on an exchange, known as "liquidity providers," and (2) those who seek to *trade with* a posted order to buy or sell, known as "liquidity takers." This petition challenges an IEX rule that operates during periods of certain price changes to give liquidity providers an automatic, last-micro-second price adjustment that, by design, gives them better pricing at the expense of liquidity takers.

A. <u>Electronic Trading</u>

Modern securities trading is virtually entirely electronic. U.S. equities exchanges, including IEX, are computer networks with live order books of liquidity providers' orders to buy or sell securities at a specified volume and price—*e.g.*, "sell 300 shares of Apple at $132.01," or "buy 200 shares of Coca-Cola at $53.27." Liquidity takers transmit their orders to the various exchanges and other venues, seeking to trade with orders to buy or sell.

Exchanges compete for order flow. A liquidity provider's order can be posted on any national securities exchange on which a particular security is traded. A variety of considerations influence order flow, including the fees that the exchange

charges for its services and "execution quality," which includes the exchange's rate of success in executing trades at its stated prices.

Liquidity providers choose whether their orders are visible to other market participants ("displayed"), or not visible ("non-displayed"). If an order is displayed, the market knows that a security is available to be bought or sold at a particular price and volume, and where to send a liquidity-taking order to execute the trade. A liquidity provider may prefer a non-displayed order for a variety of reasons (*e.g.*, not wanting to drive up prices by revealing to the market a large buy order).

Exchanges aggressively compete for the displayed orders of liquidity providers. As described more fully below (*infra* at 10-11), regulations implementing the Exchange Act effectively require that orders seeking to take liquidity are routed to the exchange with the best displayed bid or offer. Accordingly, exchanges are constantly seeking incentives to induce market participants to display liquidity on their venues. Historically, exchanges have competed based on the performance of their matching engine, the fees charged (or rebates paid) to post liquidity, or how they allocate incoming orders against the posted liquidity. That competition, unsurprisingly, has yielded clear advancements in market structure.

The exchanges' systems are constantly updating posted liquidity, processing incoming orders from liquidity takers, and executing trades. This happens, quite literally, at the speed of light. Exchanges are connected to each other and to other

market participants by fiber-optic and other high-speed data connections. But even the speed of light is not exempt from physical and geographical limitations. The distance between senders and receivers of market data, as well as other technical factors, means that information does not reach every destination at the exact same instant. That time difference, referred to as "latency," is measured in microseconds.[1]

B. "Protected Quotations" And Trade Execution

The manner in which market participants and exchanges handle orders is governed by a set of rules, adopted under the Exchange Act, known as Regulation NMS. Two interrelated components of Regulation NMS are relevant here.

First, Rule 600(b) establishes that certain bids and offers posted on an exchange will be deemed "protected quotations." To qualify as a "protected quotation," a bid or offer must: (a) be immediately and automatically executable; (b) appear in consolidated national market data feeds (*i.e.*, it must be "displayed"); and (c) be either the highest (best) bid, or the lowest (best) offer, on the exchange (collectively, the best bid/offer, or "BBO", of the exchange). The best bid across all exchanges and the best offer across all exchanges are together known as the national best bid/offer, or "NBBO," which fluctuates continuously during a trading day. *See* 17 C.F.R. § 242.600(b)(43).

[1] A microsecond is equal to one millionth of a second (0.000001).

Second, Rule 611 generally prohibits exchanges (and all other trading venues) from executing a trade at a worse price (from the perspective of the liquidity taker) than any "protected quotation" at any exchange. The rule does not *require* routing of orders to exchanges displaying the NBB or NBO, but (subject to narrow exceptions) an order cannot be executed at a price inferior to the NBBO. For example, suppose a "protected quotation" to sell 100 shares of AT&T for $28.50 is displayed on Nasdaq. No order to buy 100 shares of AT&T should be executed by any exchange or trading platform at a price higher than $28.50. Known as the "Order Protection Rule," Rule 611 was intended to provide the public with "fair and efficient access" to quotes to ensure that, all else being equal, the best price they see (*i.e.*, the NBBO) is the price they actually get. *See* Regulation NMS, Exchange Act Rel. No. 51,808 (June 9, 2005), 70 Fed. Reg. 37,496 at 37,520 (June 29, 2005); 17 C.F.R. § 242.600(b)(61); 17 C.F.R. § 242.611(a)(1).

Attracting displayed liquidity is good for an exchange's bottom line. An exchange generates revenues when a trade is executed. Displayed liquidity not only advertises to the market that the exchange has a willing counterparty, but, if displayed liquidity qualifies as a "protected quotation," Rule 611 effectively guarantees that the exchange will receive liquidity takers' order flow.

C. IEX

The Commission approved IEX to become a national securities exchange in 2016. IEX claimed that two components of its trading platform promised to "offer superior performance for all market participants."[2]

First, IEX's "Speedbump" imposes an artificial 350-microsecond delay on all order messages sent to IEX, achieved by adding approximately 38 miles of coiled fiber-optic cable where IEX's computer servers connect to communication lines. The Speedbump was designed to operate symmetrically for displayed orders, and the Commission approved it on that basis.

Second, the "Crumbling Quote Indicator" or "CQI" is IEX's algorithm that seeks to predict when the NBBO is about to change based on trading data IEX observes across other exchanges. When IEX's computers deem the NBBO for a particular security to be a "crumbling quote," the CQI turns "on" for up to two milliseconds (2,000 microseconds). For orders subject to the CQI, IEX's computers will automatically reprice a liquidity provider's existing order when the CQI is on while any incoming orders from liquidity takers are traversing the IEX Speedbump. The new price favors the liquidity provider. The incoming order must either pay the new (worse) price, or, as is often the case, the incoming order does not execute.

[2] IEX, Our Story, available at https://iextrading.com/about/.

IEX touted the Speedbump and CQI as a marketing tool to capitalize on the narrative of "latency arbitrage" set forth in a 2014 Michael Lewis book. In this narrative, firms that had heavily invested in high-performance trading systems were unfairly profiting from their ability to receive and react to trading data microseconds faster than other traders. IEX's founders proclaimed that such trading was common and harmed other market participants.[3] That marketing narrative neglected to mention the important value such firms provide to the markets, such as facilitating trading of exchange-traded funds (ETFs) by retail investors (who gain easy access to sought-after market segments) or S&P 500 futures by institutional investors seeking to manage portfolio risk.

When the Commission approved IEX as an exchange (and until the Proposal in dispute here), IEX applied the CQI to only *non-displayed* liquidity. IEX itself acknowledged that applying the CQI to reprice *displayed* liquidity would be "too disruptive to normal continuous trading or likely to have unintended secondary

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[3] Lewis's book lionized IEX's founders. *See, e.g.*, Michael Lewis, *Flash Boys: A Wall Street Revolt* (2014) at 274 ("Having understood the problems, my characters had set out not to exploit them but to repair them."). The book generated substantial attention for IEX among media and regulators, but its accuracy has been heavily criticized. *See, e.g.*, Peter Kovac, *Flash Boys: Not So Fast: An Insider's Perspective* (2014) (providing chapter-by-chapter analysis and critique); *id.* at ix (noting, among other errors, that research Lewis cited as evidence of harmful trading strategies ultimately concluded that such strategies were not "consistent with the data").

consequences, such as a deleterious effect on liquidity for investors attempting to access the quote."[4]

Although IEX launched with much fanfare, it has struggled to compete as an exchange and remains a minor player, with average daily market share of approximately 2%.[5] The rule in dispute here is intended to induce liquidity providers to post liquidity on IEX by reaching into the pockets of liquidity takers. As explained in more detail below (*infra* at 17-18), the rule exploits IEX's built-in delay to systematically grant liquidity providers better prices during crucial moments of price change in the market, all at the expense of liquidity takers. Indeed, IEX trumpets the fact that the rule is designed to drive business to IEX's platform, although IEX prefers not to acknowledge that it seeks to pay for these "incentives" with liquidity takers' money rather than its own.

D. Citadel

Citadel Securities LLC ("Citadel" or "Petitioner") is a leading global securities market maker and trading firm. Citadel trades approximately 22% of U.S. equities volume each year in proprietary and retail trades.[6] Citadel processes

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[4] IEX, Incentivizing Trading Behavior Through Market Design, at 8 (Dec. 2017), avail. at https://iextrading.com/docs/Incentivizing%20Trading%20Behavior.pdf.

[5] *See, e.g.*, IEX, Historical Stats, available at https://iextrading.com/stats/#historical-stats.

[6] Citadel, Equities and Options, available at https://www.citadelsecurities.com/products/equities-and-options/.

approximately 40% of all retail securities trades in the U.S. market. (Doc. 54 at 2 n.6.) Retail investors include individuals buying and selling securities through their brokers, online trading platforms, and other service providers. In this capacity, Citadel connects broker-dealers servicing retail customers (*e.g.*, Fidelity, Charles Schwab, TD Ameritrade) with the liquidity ecosystem and performs a variety of services, including ensuring timely and cost-effective routing, providing principal price improvement, and fulfilling regulatory requirements.

Citadel is "a top 5 market maker on IEX (and therefore a key member of the constituency [the challenged Proposal] is designed to benefit)." (Doc. 45 at 2-3; Doc. 54 at 2.) More than 50% of Citadel's trading activity on IEX is on behalf of retail investors, and the vast majority of those retail orders (more than 80%) are for liquidity takers. (Doc 45 at 4.) Thus, a significant portion of Citadel's trades on IEX—at least 40%—are on behalf of retail customers seeking to execute against orders posted on IEX by liquidity providers.

E. IEX's Proposed D-Limit Order Rule

In late 2019, IEX filed with the Commission a proposal seeking authorization for a new order type, called a "Discretionary Limit or 'D-Limit' order." (Doc. 1 at 71,997.) As noted above, the CQI previously applied to only *non-displayed* orders. The Proposal sought to apply it to *displayed* orders, a reversal of IEX's prior position

that displayed liquidity should not be subject to this type of repricing by the exchange.

IEX claimed that the Proposal would "address" purported latency arbitrage involving displayed liquidity. IEX reported that, during September 2019, for incoming liquidity-taking orders "when IEX has a displayed quote, 21% arrive during the 0.007% of the trading day when the CQI is on." (Doc. 1 at 72,002.) The Proposal did not evaluate the proportion of such orders related to activity that *cannot* be classified as latency arbitrage, such as retail investor orders, hedging, and larger orders routed across multiple exchanges simultaneously (*e.g.*, institutions seeking to execute large trades by sweeping the market). Nor did the Proposal evaluate other possible causes for the correlation between trading volume and the CQI being on, or consider whether other exchanges observed similar correlations between volume and price fluctuation.[7]

Solely for purposes of its filing, IEX classified its members as "proprietary," "full service broker-dealers," or "agency broker-dealers." IEX asserted that

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[7] IEX's Proposal observed that when the CQI is on, liquidity takers "experience positive price markouts one second after the trade on a share basis 76% of the time, compared to 23.5% of the time when the CQI is off." (Doc. 1 at 72,001.) A "positive price markout" is defined as the current market price improving from the liquidity taker's perspective. The Proposal did not consider alternative explanations—*e.g.*, that short-term price moves against a liquidity provider are common when a liquidity taker's market-wide sweep order takes out an entire price level (which will also turn the CQI on).

"proprietary" trading firms—which it defined as firms "that are trading for their own account rather than acting in an agency capacity for an independent beneficial owner"—are more likely to trade against orders while the CQI is on. IEX asserted that proprietary firms trading when the CQI is on are likely engaged in latency arbitrage. IEX initially classified Citadel as a 100% proprietary trading firm.

The Proposal was designed to advantage IEX's liquidity providers by automatically re-pricing D-Limit orders to a more favorable price whenever the CQI was on. By definition, a price *more* favorable to liquidity providers is *less* favorable to liquidity takers, who pay a worse price than they would have without IEX's intervention (if they are able to execute at all, given that most liquidity-taking orders are limit orders subject to a fixed price constraint).

Here's how it works. A liquidity provider's D-Limit order is displayed on IEX as an ordinary limit order.[8] But when the CQI turns on, IEX's computers adjust the price of the order (typically by one cent) in the direction that favors the liquidity providers (*e.g.*, an order to sell at $9.50 would be repriced to $9.51). This repricing occurs while inbound orders from liquidity takers are delayed by the IEX Speedbump. In effect, the D-Limit order ensures that the Speedbump is asymmetrically applied only to liquidity takers' inbound orders; liquidity providers

[8] A limit order seeks to buy or sell a security at a certain price or better (from the offeror's perspective)—*e.g.*, "buy 200 shares of Goodyear at $10.65 or lower."

do not have to send a repricing order through the Speedbump because IEX dynamically reprices orders based upon IEX's observation of market conditions from *inside* the computer matching engine. The net effect is that IEX moves the prices favorably for liquidity providers before liquidity-taking orders can arrive for execution.

If the liquidity taker's order permits execution at the worse price, then the trade can be completed and the liquidity taker absorbs the loss (*i.e.*, it pays more for a buy order, or receives less for a sell order). But often the liquidity taker's order will be price-limited at the displayed price, and no trade is completed. During periods of significant price movement—which is when the CQI is likely to turn on—the price may continue to run away from the liquidity taker, such that the available price may be materially worse for the liquidity taker by the time it submits a new order at IEX or elsewhere.[9] And under Regulation NMS, orders seeking liquidity generally must be routed to IEX irrespective of this heads-I-win, tails-you-lose dynamic operating for the sole benefit of IEX's liquidity providers.

[9] If portions of such an order are immediately executed on other exchanges while the portion sent to IEX is still making its way through the Speedbump, IEX will observe the increased trading activity at the current price level. That observation can trigger the CQI and cause IEX to reprice displayed quotes to the disadvantage of the liquidity taker.

F. Public Commentary

IEX filed its Proposal with the Commission on December 16, 2019. The Commission received more than 50 comments from, among others, a major exchange family (Nasdaq), various investment firms, market makers, broker-dealers, trade groups, and individuals. IEX submitted four letters in support of its original Proposal and in response to certain comments. Citadel submitted three letters responding to the Proposal and IEX's additional letters. The commenters expressed a range of views—positive, negative, and mixed. Five categories of comments are particularly relevant here.

1. *Flawed Data And Flawed Premise*

Numerous commenters observed that "IEX's data," which purported to demonstrate the prevalence of purported latency arbitrage, "is overly simplistic and fails to prove its point." (Doc. 11 at 6; *see also* Doc. 42 at 2; Doc. 45 at 3-6.) Commenters noted that the *correlation* of trading activity and price instability predicted by the CQI did not necessarily represent "aggressive arbitrageurs"; rather, in such circumstances "the market also will likely include ordinary liquidity-seekers, such as institutional investors and market makers." (Doc. 11 at 6.)

IEX's data did not attempt to account for trading activity that clearly does not meet their (nebulous) definition of latency arbitrage, such as intermarket sweep orders ("ISOs") and bona fide hedging activities. (Doc. 45 at 7-9; *see also* Doc. 14

at 3; Doc. 27 at 9-10.) Both activities were likely to correlate with the CQI being on. ISOs are certain large orders that seek to take all displayed liquidity across multiple exchanges (and therefore may *trigger* the CQI); hedging is logically correlated with periods of price changes.

Commenters also observed that IEX attempted to buttress its flawed data with erroneous assumptions about its members. Most notably, the Proposal deemed Citadel to be a purely "proprietary" trading firm, and treated 100% of Citadel's trades as therefore potentially consistent with its amorphous concept of latency arbitrage. Citadel explained, however, that the majority of its "trading activity on IEX is on behalf of *retail* investors." (Doc. 45 at 4) (emphasis added). Citadel then submitted data demonstrating that retail orders accounted for more than 50% of Citadel's trading activity on IEX in a given month, and that the CQI was on for roughly 15% of Citadel's retail orders on IEX executing against displayed liquidity. (Doc. 54 at 3.) Other commenters agreed that IEX's "proprietary" label inaptly deemed numerous "bona fide market makers whose liquidity is critical to pre-trade price discovery" to be suspected latency arbitrageurs. (Doc. 11 at 6 (quoting Doc. 1 at 72,003); *see* Doc. 56 at 2.)

IEX supplemented its original submission with data covering an expanded time period, but did not respond to these criticisms. (Doc. 49 at 7, Appendix A.) As for Citadel, IEX asserted that excluding Citadel's trades from the data led to the

same conclusion. (Doc. 57 at 6.) IEX did not explain why ignoring such a material error in the premise of IEX's analysis was a logically coherent response.

2. *Discrimination Against Liquidity Takers*

Commenters objected to the Proposal's discrimination against all liquidity takers, who will see displayed liquidity disappear and repriced for the worse when the CQI is on (known as "quote fading"). As Nasdaq explained, the Proposal would "purposefully fade quotes to the express advantage of liquidity providers who use the D-Limit order type and to the express disadvantage of both liquidity seekers and liquidity providers who do not use the D-Limit order type." (Doc. 41 at 5; *see also* Doc. 10 at 3 (Proposal would harm "institutional and retail investors.").) Even commenters who praised certain perceived advantages of the Proposal acknowledged that "it certainly will discriminate broadly against liquidity takers." (Doc. 56 at 2.)

3. *Consequences Of Broader Adoption*

Commenters expressed concern that broader adoption of the D-Limit order type would further undermine "the reliability of the NBBO and resiliency of liquidity, particularly during periods of market volatility." (Doc. 45 at 10.) One commenter noted that "if other markets and their participants were to adopt similar order types, a huge chunk of the consolidated quote may fade at the same time,

potentially when markets are under stress and liquidity is needed most." (Doc. 25 at 3.) A leading trade association echoed that concern. (Doc. 20 at 4.)

Commenters noted that the Proposal gives IEX a "venue-specific advantage" in attracting liquidity providers, which will cause "pressure for other exchanges to adopt a similar mechanism." (Doc. 45 at 10.) Nasdaq criticized the IEX's motives more bluntly: "At its core, this Proposal is nothing more than a thinly-veiled attempt by IEX to bolster its dismal market quality for displayed orders." (Doc. 11 at 12.)

4. *Commission's Rejection Of Materially Identical Proposal*

Commenters noted that the Proposal was, in crucial respects, indistinguishable from a recent proposal submitted by CboeEDGA. CboeEDGA had proposed a delay of up to four milliseconds on incoming liquidity takers' orders, during which time liquidity providers could change the price of posted liquidity. The Commission rejected that proposal, concluding that the asymmetric delay was unfairly discriminatory.

Commenters explained that IEX's Proposal was virtually identical from the perspective of liquidity takers, who suffer discrimination in favor of liquidity providers. (Doc. 10 at 2; *see also* Doc 15 at 1-2.) Responding to IEX's assertion that a liquidity taker could alter its order-sequencing strategy, one commenter quoted the Commission's rationale in rejecting the CboeEDGA Proposal: "a market participant's ability to . . . alter its trading strategies in response to this proposed rule

does not, by itself, demonstrate that the proposal would not permit unfair discrimination." (Doc. 42 at 3 (quoting Cboe EDGA Exchange, Inc.; Order Disapproving Proposed Rule Change to Introduce a Liquidity Provider Protection Delay Mechanism on EDGA, Exchange Act Rel. No. 88,260 (Feb. 21, 2020), 85 Fed. Reg. 11,425 at 11,435 (Feb. 27, 2020) ("CboeEDGA Disapproval Order")).)

5. *Whether D-Limit Orders Qualify As "Protected Quotations"*

Several commenters argued that liquidity providers' displayed D-Limit orders should not qualify as "protected quotations" entitled to Rule 611's significant regulatory benefits. "IEX specifically acknowledges that 'D-Limit orders *may not be accessible* to other market participants' when the CQI signal is on." (Doc. 10 at 7 (quoting Doc. 1 at 72,003) (emphasis added).) That feature of the D-Limit order, commenters observed, was at odds with the Commission's conclusion when approving IEX as an exchange in 2016 that "an access delay that does not allow the repricing of *displayed* orders does not impact an exchange's displayed quotation, and cannot be said to lead to 'maybe' quotations." (Doc. 10 at 7 n.18 (quoting In the Matter of the Application of Investors' Exchange, LLC for Registration as a National Securities Exchange, 81 Fed. Reg. 41,141 at 41,156 n.216 (June 16, 2016) ("IEX Approval Order") (emphasis added).)

Moreover, commenters argued that the D-Limit order "fundamentally changes the operation of the IEX Speedbump, causing it to resemble an asymmetric speed

bump from the perspective of a liquidity taker." (Doc. 10 at 7.) Again, commenters noted that the Commission had stated in 2016 that it "would be concerned about access delays that were imposed only on certain market participants." (*Id.* (quoting Commission Interpretation Regarding Automated Quotations Under Regulation NMS, 81 Fed. Reg. 40785 at 40792 n.75 (June 23, 2016)); *see also* Doc. 11 at 8-9; Doc. 13 at 4.)

G. The Commission's Approval Order

The crux of the Commission's Approval Order was its conclusion that the D-Limit order was "narrowly tailored" to address so-called "latency arbitrage" and therefore neither unfairly discriminated against liquidity takers nor imposed an unjustified burden on competition.

The Commission acknowledged that "[t]he comment file on this proposal reflects a dichotomy of views on the issue of latency arbitrage" (Doc. 5 at 18), but summarily endorsed IEX's view that the purported strategy should be disfavored. The Commission accepted IEX's contention that liquidity-taking orders arriving at IEX "while the CQI is on are strongly correlated to latency arbitrage strategies." (Doc. 5 at 38 n.133.) The Commission adopted IEX's theory that increased trading volume when the CQI is on must be the result of latency arbitrage. For example, the Commission relied on IEX's report that "the CQI was on for 1.64 seconds per symbol per day on average, which is 0.007% of the time during regular market

hours," but "received 33.7% of marketable orders" for all liquidity and "24% of displayed [liquidity]" during that window. (Doc. 5 at 9 & n.36.) And the Commission endorsed IEX's conclusion that, because firms IEX labeled as "proprietary" were more active than other types of firms when the CQI was on, those firms "appear to be able to engage in a form of latency arbitrage." (Doc. 5 at 10 (quoting Doc. 1 at 72,002).) The Commission also credited anecdotal reports from "asset managers supporting the proposal who argue that the prevalence of such trading strategies impacts their willingness to participate in the on-exchange displayed market." (Doc. 5 at 20.)

The Commission did not independently analyze IEX's theory. The Commission did not examine any other plausible causes of increased trading volume when the CQI is on, including whether higher trading activity is naturally correlated with price changes and might reflect strategies *other* than latency arbitrage (*e.g.*, quantitative trading algorithms sensitive to price changes but not premised on short-term price arbitrage; hedging activities; or larger orders seeking to trade with all liquidity available at a particular price level). The Commission did not examine whether other exchanges would likewise observe a correlation between price changes and trade volume. The Commission has never attempted to define latency arbitrage with any precision, nor has it analyzed the economic benefits or harms of such (ill-defined) activity.

The Commission did not examine IEX's classification of firms. IEX did not dispute that the Proposal had initially mischaracterized Citadel as a purely "proprietary" firm. But IEX's only response was to *exclude* Citadel's trades from its "analysis." The Commission adopted that illogical response wholesale, noting that IEX's "new data, despite excluding [Citadel's] trading activity, still 'precisely matches patterns seen for all firms classified as proprietary." (Doc. 5 at 10 n.38.) The Commission did not attempt to square Citadel's data with IEX's assumption that orders arriving when the CQI was on were presumed to reflect latency arbitrage. Nor did the Commission critically examine whether IEX's admitted mischaracterization of Citadel called IEX's other classifications and conclusions into question.[10]

In response to Citadel's data demonstrating that, contrary to IEX's assertions, large swaths of other market participants (like retail investors) would be affected by the D-Limit order, the Commission ignored it. IEX did not dispute that more than 50% of Citadel's substantial trading activity on IEX in a given month was on behalf of retail investors, or that the CQI was on for approximately 15% of Citadel's retail

[10] The Commission also quoted the submission of the self-styled "Anonymous Industry Expert," who claimed that "retail orders are likely sent to Citadel at random times" . . . but that Citadel likely *chooses* to route these orders to IEX during a CQI condition." (Doc. 5 at 9 n.38.) To the extent the Commission's quotation implied endorsement, the Commission offered no supporting basis (neither did the commenter). Lest there be any doubt, the statement is false.

orders on IEX executing against displayed liquidity. And IEX acknowledged that it did not provide data specifically evaluating the Proposal's effect on retail orders, let alone on orders by numerous other market participants. Nevertheless, the Commission never attempted to determine how many, and what type of, orders would be adversely affected by the Proposal.

The Commission acknowledged that numerous commenters likewise expressed concern that the D-Limit order would affect myriad market participants whose trades had nothing to do with latency arbitrage. But the Commission summarily dismissed those concerns, declaring that IEX's members could address such harms by "accounting" for the Speedbump via routing strategies—*i.e.*, sequencing order traffic to arrive at IEX first. (Doc. 5 at 12.) The Commission did not acknowledge the perversity of suggesting that IEX should be *rewarded* with preferential order routing for imposing *burdens* on investors. Nor did the Commission address the potential difficulties and other adverse consequences that exchange members would face in attempting such a workaround. The Commission merely stated that, when approving IEX as an exchange in 2016, it had concluded that routing strategies could account for difficulties occasioned by the IEX Speedbump applied to *non-displayed* orders. The Commission did not explain how that conclusion applied to *displayed* orders, which raise fundamentally different concerns. Nor did the Commission acknowledge that exchange members do not

know whether a particular displayed limit order on IEX is a regular limit order (which will not reprice) or a D-Limit order (which will reprice if the CQI is on).

In response to commenters' concerns that the D-Limit order would impose significant burdens on competition, the Commission endorsed IEX's contention that overall liquidity will improve because market participants will be "incentivized" to post liquidity on IEX. (Doc. 5 at 52.) But the Commission did not analyze the costs of subsidizing liquidity providers or the effects on liquidity providers at other exchanges.

The Commission acknowledged commenters' concerns that widespread adoption of the D-Limit order by other exchanges would "exacerbate the number of inaccessible quotes in the marketplace" and cause other harms. (Doc. 5 at 33.) But the Commission did not analyze those concerns. The Commission stated only that it "would carefully analyze" such future submissions, presuming that rejecting a copycat proposal would be possible (rather than paradigmatically arbitrary and capricious). (Doc. 5 at 33-34 n.114.)

The Commission denied that IEX's Proposal was substantially similar to the CboeEDGA Proposal. The Commission relied primarily on its assertion that "IEX, unlike CboeEDGA, presented substantial evidence of latency arbitrage occurring on its market" and claimed that IEX's Proposal was "narrowly tailored" to address it. (Doc. 5 at 47.) The Commission also noted that CboeEDGA "did not address the

impact on relatively slower liquidity providers." *Id.* The Commission did not acknowledge that both proposals were materially indistinguishable with respect to the discriminatory effect on liquidity takers. Nor did the Commission acknowledge its reasoning when rejecting the CboeEDGA Proposal that "a market participant's ability to adapt its business model or alter its trading strategies in response to this proposed rule does not, by itself, demonstrate that the proposal would not permit unfair discrimination." (CboeEDGA Disapproval Order at 37.)

The Commission also concluded that D-Limit orders should be "protected quotations" under Rule 611. The Commission again relied solely on its 2016 approval of IEX's Speedbump as applied to *non-displayed* (and thus unprotected) liquidity, asserting that the D-Limit order "is not introducing any new delay or modifying its speed bump." (Doc. 5 at 37.) The Commission did not answer commenters' objections that it had not previously decided whether asymmetrically repricing *displayed* orders is consistent with the definition of a "protected quotation." Nor did the Commission acknowledge that the D-Limit order fundamentally changes the accessibility of displayed quotes, making the Speedbump an asymmetric burden on only liquidity takers.

SUMMARY OF ARGUMENT

I.A. The Commission failed to support with substantial evidence its conclusion that the Proposal is "narrowly tailored" to avoid unfair discrimination

and burdens on competition. IEX asserted that liquidity taking when the CQI is on is "strongly correlated" with purported latency arbitrage. But IEX demonstrated only that there is increased trading volume when the CQI is on. That observation does not demonstrate latency arbitrage; it merely *assumes* that latency arbitrage exists and causes the correlation. Likewise, IEX assumed that what it labeled as "proprietary" firms are engaged in so-called latency arbitrage if trading when the CQI is on. The Commission did not scrutinize either of IEX's basic assumptions or determine the harm the Proposal inflicts on investors that are not even arguably engaged in purported latency arbitrage.

B. More troubling still, the Commission failed to examine substantial contrary evidence demonstrating that the Proposal would, in fact, harm such numerous investors. Multiple commenters voiced that concern and offered specific examples of how the Proposal would clearly harm retail trades, legitimate hedging, ISOs, and other market activity. Citadel, which IEX mislabeled as a "proprietary" firm, offered data demonstrating that more than 50% of its trades on IEX were on behalf of retail customers and that the vast majority of those retail trades were liquidity-taking transactions—a substantial portion of which arrived at IEX when the CQI was on. In response, IEX merely excluded Citadel's data, but did not confront the logical inconsistencies it presented for IEX's assumptions. The Commission accepted IEX's non-answer, failed to conduct its own analysis of the Proposal's effect on ordinary

investors, and did not attempt to reconcile Citadel's data with the conclusion that the Proposal was "narrowly tailored."

Instead, the Commission summarily asserted that market participants could "account" for any negative efforts of the Proposal, apparently by routing orders to IEX first. The Commission did not explain how that workaround would be practically achievable or consider the adverse consequences it would impose. The Commission merely rested on its 2016 decision approving IEX as an exchange—when the CQI applied only to *non-displayed* liquidity—as proof that discrimination caused by application of the CQI to *displayed* liquidity could be remedied.

The Commission also failed to critically analyze the Proposal's burden on competition. The Commission instead relied on IEX's self-serving statement that the Proposal would incentivize liquidity providers to post more liquidity on IEX. But forcing liquidity takers to subsidize liquidity providers *is* the unfair competition, not a *justification* for it. Nor did the Commission analyze the effect that permitting IEX to grant such a unilateral advantage to liquidity providers on its exchange would have on liquidity providers on other exchanges.

Even as it assumed away the unfair competitive advantages the Proposal conferred, the Commission ignored the implications of the Proposal if it were adopted more widely in the market. The Commission stated only that it would "carefully analyze" future proposals.

II.A. The Commission's failure to distinguish between the substantially identical CboeEDGA and IEX proposals was arbitrary and capricious. The Commission rejected the CboeEDGA Proposal, largely because it discriminated against liquidity takers. The IEX Proposal does the very same thing, allowing repricing of quotes to the detriment of all liquidity takers when prices are changing. The Commission's attempts to distinguish these proposals do not address that fundamental, identical feature.

B. The Commission's reasoning in approving the IEX Proposal is incompatible with its reasoning rejecting the CboeEDGA Proposal. The Commission criticized CboeEDGA—but not IEX—for providing a benefit to liquidity providers without a corresponding obligation. The Commission also rejected CboeEDGA's suggestion that the proposal's discriminatory effects could be mitigated by changes in market participants' routing strategies, but the Commission embraced that very argument when approving the IEX Proposal.

III.A. The Commission's conclusion that D-Limit orders qualify as "protected quotations" is arbitrary and capricious. The Commission's terse declaration that the order is protected because the Commission previously approved the IEX Speedbump is wrong. The Commission approved the Speedbump only insofar as it operated *symmetrically* on displayed liquidity; this Proposal makes the Speedbump function

asymmetrically on displayed liquidity. Consequently, orders *appear* immediately executable, but are not—a result that IEX itself criticized in 2016.

B. The Commission's determination that D-Limit orders qualify as protected quotations contradicts the Commission's own regulations and guidance. A protected quotation must be automated and immediately accessible. By design, the D-Limit order is neither. It operates to reprice an otherwise executable order, making it inaccessible to liquidity takers at the displayed price.

STANDING

Petitioner executes trades on securities exchanges, including IEX, on behalf of itself and other market participants (including retail investors). Petitioner and many of its customers are directly harmed by the Proposal's unfair discrimination and burden on competition in favor of liquidity providers on IEX using the D-Limit order. Petitioner has standing as a "person aggrieved" under 15 U.S.C. § 78y(a)(1). *See Chamber of Commerce v. SEC*, 412 F.3d 133, 138 (D.C. Cir. 2005).

ARGUMENT

I. The Commission's Conclusion That The Proposal Is "Narrowly Tailored" To Avoid Unfair Discrimination And Burdens On Competition Is Arbitrary And Capricious And Not Supported By Substantial Evidence.

The Commission concluded that the Proposal was "narrowly tailored" to target latency arbitrage, and therefore did not unfairly discriminate against liquidity takers or burden competition, in violation of Sections 6(b)(5) and 6(b)(8) of the

Exchange Act.[11] But IEX provided woefully insufficient data assessing the effect of the Proposal on market participants *not* engaged in what it deemed "latency arbitrage." Instead, IEX proffered a classic syllogistic fallacy: Because (IEX claimed) liquidity-taking activity when the CQI is on is "strongly correlated" with latency arbitrage, *all market participants* that trade when the CQI is on are therefore engaging in latency arbitrage. The premise and the conclusion are flawed, yet the Commission accepted them at face value. Indeed, neither IEX nor the Commission has defined with meaningful precision what activities "latency arbitrage" entails, nor has either offered coherent analysis why such activities warrant discrimination. "Speculative" agency decisions that fail to examine the "vast majority" of relevant data or conduct independent analysis must be vacated. *See Nat'l Lifeline Assoc. v. FCC*, 921 F.3d 1102, 1115 (D.C. Cir. 2019).

Worse, the Commission ignored substantial record evidence that *contradicted* IEX's flawed logic and claims of narrow tailoring. Citadel submitted data demonstrating that a significant portion of liquidity-taking orders on behalf of retail investors arrive at IEX when the CQI is on (and, in fact, may *cause* the CQI to turn on). The Commission did not analyze this data or make a determination as to the

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[11] The Commission invoked the "narrowly tailored" refrain seventeen times, in response to virtually every criticism of the Proposal. (Doc. 5 at 20, 21, 26, 26, 34, 34 n.115, 35, 39 n.133, 40, 43, 44, 44, 45, 47, 48, 51, 52.)

amount—in absolute or relative terms—of non-latency-arbitrage activity that would be affected and harmed by the D-Limit order.

Instead, the Commission summarily asserted that market participants can "account" for such harms. That response simply dodges the question. The Commission did not make any findings regarding the extent to which such measures (if they are even permissible given other regulatory obligations) would harm ordinary investors, or otherwise assess whether the Proposal could be modified to minimize those harms.

A. The Commission Did Not Scrutinize IEX's (Flawed) Logic That Liquidity-Taking Orders Arriving When The CQI Is On Are Highly Likely To Reflect Latency Arbitrage

The Commission accepted IEX's assumption that liquidity-taking trades when the CQI was on were evidence of what it called "latency arbitrage." IEX's assertion rested on two premises: (i) that liquidity-taking trades occurred in amounts disproportionate to the period of time when the CQI was on; and (ii) those trades were submitted primarily by firms IEX labeled as "proprietary," which IEX further assumed were employing latency arbitrage strategies. The Commission did not critically examine either premise, and failed to consider data contradicting IEX's conclusion. "That is not the reasoned analysis that the Exchange Act and the APA require." *Susquehanna Int'l Grp., LLP v. SEC*, 866 F.3d 442, 447 (D.C. Cir. 2017).

1. *Increased Trading When The CQI Is On Does Not Demonstrate Pervasive Latency Arbitrage*

The Commission endorsed IEX's conclusion that "the CQI is almost always 'off,' but during the very short periods of time when it is 'on, . . . certain types of trading strategies'"—IEX's shorthand for purported latency arbitrage—"are seeking to aggressively target liquidity providers." (Doc. 5 at 9 (quoting Doc. 1 at 71,999).)

All that correlation tends to show is that significant trading occurs when the CQI is on. It does not demonstrate *why* that correlation exists or that latency arbitrage is even occurring—much less that the increased volume is *the result of* such a purported trading strategy. Nor does it account for other reasons why trade volume and the CQI would be correlated, such as the elementary proposition that increased trade activity often *coincides with* price changes, especially for large orders that trade across multiple exchanges. And it does not illuminate the proportion of such trades, if any, that are driven by IEX's conception of latency arbitrage. This Court rightly "demand[s] that the Commission consider reasonably obvious alternative[s] . . . and explain its reasons for rejecting alternatives in sufficient detail to permit judicial review." *Nat. Res. Def. Council v. SEC*, 606 F.2d 1031, 1053 (D.C. Cir. 1979). The Commission failed that duty here.

The Commission also endorsed IEX's simplistic assertions comparing the fraction of the day that the CQI is on to overall trading volume or the "odds" that an ordinary investor's order would arrive when the CQI was on. Trading volume is not

evenly distributed throughout the day. (*See* Doc. 5 at 9.) It is therefore sophistry to suggest that dark forces are at work because a significant portion of marketable orders arrived at IEX during "0.007%" of the trading hours. Likewise, the Commission's statement that "if the CQI is on for 5 seconds in a day, then an investor's marketable order arriving randomly to IEX would have a 1 in 5,000 chance of arriving when the CQI is on" (Doc. 5 at 15 n.53 (citing Doc. 49 at 12)) is a superficial observation, not reasoned analysis. Orders do not "randomly" arrive at an exchange; they arrive in anticipation of and in response to complex market and regulatory forces—including forces directly related to price changes. Indeed, large orders executed across multiple exchanges can readily trigger the CQI, which would explain why orders arrive when the CQI is on. The Commission did not begin to analyze the many reasons that increased trading volume might intersect with the CQI being on.

2. *Trading By Firms IEX Labeled "Proprietary" Does Not Demonstrate Pervasive Latency Arbitrage*

IEX attempted to buttress those unsupported inferences by layering on yet another. IEX classified its members into one of three self-created categories—"proprietary trading firms, full service broker-dealers, or agency broker-dealers" (Doc. 1 at 72,002)—and determined that "proprietary" firms submitted liquidity-taking orders when the CQI was on more than firms in the other two categories. IEX then jumped to the conclusion that firms engaged in such trading "appear to be able

to engage in a form of latency arbitrage." (Doc. 1 at 72,002.) Tellingly, IEX offers no specifics as to what that "form" entails, perhaps because the D-Limit order itself implements what IEX has previously deemed to be "latency arbitrage"—namely, observing market activity on other exchanges and repricing orders before a trading counterparty can react. The only difference is that IEX now sees commercial advantage in using such a strategy to attract liquidity providers to its platform.

The Commission adopted IEX's chain of "reasoning" wholesale (Doc. 5 at 10 (quoting Doc. 1 at 72,002)), but failed to examine any of its manifest flaws. For starters, IEX labeled Citadel a "proprietary trading firm" and assumed that 100% of Citadel's trades on IEX were on behalf of a "proprietary" strategy. In response, Citadel examined the orders it routed to IEX during May 2020 and provided that data to the Commission. Citadel's analysis demonstrated that more than 50% of its trading activity on IEX was on behalf of *retail* orders, not "proprietary" strategies. Moreover, the CQI was on for approximately 15% of Citadel's retail orders that removed displayed liquidity—laying waste to IEX's supposition that predominantly latency arbitrage is occurring when the CQI is on. (Doc. 54 at 3-4.)

The Commission acknowledged IEX's mischaracterization of Citadel, but did not question IEX's labels more broadly or whether IEX's glaring error should undermine its corresponding inferences. Instead, the Commission repeated IEX's explanation that, even when "excluding [Citadel's] trading activity, [the data] still

'precisely matches patterns seen for all firms classified as proprietary.'" (Doc. 5 at 10 n.38 (quoting Doc. 49 at 13).) But that is no explanation at all—it merely restates the assumption that the remaining firms IEX labeled as "proprietary" were engaged in latency arbitrage, and, in any event, that the material error about the nature of Citadel's activity was IEX's only blunder.

The Commission thus repeated one of the errors that led this Court to vacate the Commission's decision in *Susquehanna*. There, the Commission had approved a rule change that lowered a clearing agency's members' upfront fees but eliminated certain refunds that were sometimes passed on to the members' customers, resulting in lower net fees. The Commission did not consider the effect on net fees, focusing instead on benefits to "customer end users *who do not receive* passed through refunds." 866 F.3d at 451 (quoting 81 Fed. Reg. at 8,202-03). As this Court explained, "[t]he underlying assumption of this justification must be that there are so few market participants *who do receive* passed-through refunds that net fees are irrelevant," but "the SEC's Order does not provide record support for that assumption." *Id.* at 450. So too here, the Commission provided no record support for the assumption that liquidity-taking orders arriving when the CQI is on are orders that should be actively discriminated against.

The Commission's implicit policy judgments about as-yet-undefined activities that constitute purported latency arbitrage are no substitute for careful,

reasoned decisionmaking. Even assuming that "the Commission may ultimately be correct" about the existence and prevalence of latency arbitrage—which is far from clear—this Court "cannot, as a matter of administrative law, sustain its decision on the basis of such loose reasoning." *City of Holyoke Gas & Elec. Dep't*, 954 F.2d at 743. Rather, "[t]he Commission must support its decision with enough data" to bear the weight of its conclusion. *Id.*

B. The Commission Failed to Critically Analyze the Proposal's Demonstrated Overbreadth Before Concluding it was "Narrowly Tailored"

Even if the Commission reasonably concluded that latency arbitrage exists and was "strongly correlated" with the CQI, the Commission was required to evaluate whether the Proposal also harmed other market participants like "ordinary" liquidity takers. Despite "acknowledg[ing] that D-Limit orders will provide a benefit to liquidity providers but not liquidity takers," the Commission summarily adopted IEX's assertion that the Proposal "is calibrated to impact only the small number of liquidity takers that engage in latency arbitrage." (Doc. 5 at 43, 44.) No evidence, much less substantial evidence, was provided to support this critical conclusion. And it is directly contrary to ample data demonstrating that significant retail orders would, in fact, be harmed by the D-Limit order—evidence the Commission ignored.

1. *The Commission Did Not Analyze The Proposal's Effects On the Market, Including Ordinary Investors*

Citadel's data demonstrated that significant numbers of retail orders would be adversely affected by the D-Limit order type. As noted above, in the period Citadel studied, the CQI was on for approximately 15% of Citadel's retail orders that removed displayed liquidity. The vast majority of those orders—98.3% (accounting for 99.9% of the total volume)—were large orders routed to multiple exchanges. (Doc. 54 at 2-3.) Such large orders are commonplace. Citadel calculated that, in a single month, it routed approximately 2.5 million large retail orders that sought to trade *more* volume for a particular security than was available at the NBBO across all exchanges. (*Id.*) Such orders would likely trigger the CQI and thus be harmed by the Proposal. The Commission did not confront that data, nor did it meaningfully address numerous commenters' similar concerns regarding the Proposal's discrimination against liquidity takers. (*See* Doc. 37 at 6; Doc. 41 at 8; Doc. 42 at 2.)

Instead, the Commission declared that "the CQI formula does not . . . turn on in response to intermarket sweeps from large orders that execute simultaneously across multiple markets" and therefore "D-Limit orders will not reprice in response to normal market conditions and regular liquidity sweeps." (Doc. 5 at 42.) But the Commission set forth no evidence to support those conclusions, which are directly contradicted by data in the record. As this Court explained in *Susquehanna*, such

assumptions are no substitute for proper findings and analysis; "stating, not finding, is what the Commission did here." 866 F.3d at 446.

The Commission's failure is glaring because IEX *admitted* that it did not submit data actually evaluating the Proposal's effect on retail orders. (Doc. 57 at 5-6.) IEX sought to justify that failure by stating that it has "no right or ability to obtain" the necessary information to determine whether an order was placed by a retail investor. (Doc. 59 at 1.) That acknowledgement makes it even *more* unreasonable for the Commission to rely on IEX's assurances that retail investors would be unaffected by the Proposal.[12]

Even if such speculation is unavoidable (and one ignores Citadel's contradictory data), "an agency may not shirk a statutory responsibility . . . simply because it may be difficult" to conduct the requisite analysis. *NetCoalition v. SEC*, 615 F.3d 525, 539 (D.C. Cir. 2010). Indeed, the Commission's failure to scrutinize the Proposal's effect on ordinary investors bears a striking resemblance to *NetCoalition*, where this Court held that the Commission erroneously accepted an exchange's assertions regarding certain cost data because vetting that information was challenging. *Id.*; *see also Chamber of Commerce of U.S.*, 412 F.3d at 143

[12] IEX has previously acknowledged that ordinary investors can trigger the CQI, (Doc. 58 at n.6).

(difficulty in analyzing data does not relieve Commission of "statutory obligation to determine as best it can the economic implications of the rule it has proposed").

The Commission also claimed—paradoxically given the Commission's insistence that the D-Limit order was "narrowly tailored" to *avoid* ordinary investors—that ordinary investors could easily "account" for burdens created by the Proposal. But the Commission made no serious effort to explain that conclusion. Rather, it claimed to have "addressed this concern previously . . . based on the understanding that intermarket routing can be accomplished in a manner to avoid such an outcome." (Doc. 5 at 12.) That assertion is unsupported and wrong.

Before the Proposal, market participants could successfully *send* large retail orders to multiple exchanges (including IEX) to execute against displayed liquidity without attempting to stagger routing to take into account the IEX Speedbump. (Doc. 54 at 4.) That is because the asymmetric repricing on IEX resulting from the Speedbump and CQI applied only to non-displayed orders, and therefore a liquidity provider would also have to traverse the Speedbump in order to reprice a displayed order. But the D-Limit order makes the Speedbump relevant only to the liquidity taker, because IEX's computer immediately reprices displayed orders for the liquidity provider's benefit while incoming liquidity-taking orders are still delayed.

Accordingly, the Commission's statement that this concern had been "previously addressed" was wrong.[13] (Doc. 5 at 12.)

The Commission appears to assume that market participants can cause orders to *arrive* at multiple exchanges simultaneously by "accounting" for the Speedbump and routing to IEX first, but the Commission does not explain further (except for equating complex order routing dynamics to a group of friends attempting to arrive simultaneously for a dinner reservation). (Doc. 5 at 13 n.50.) What is more, trying to pursue such techniques, which presumably would include intentionally delaying routing customer orders to all venues save IEX, could violate "best execution" requirements. *See SEC v. Cap. Gains Res. Bureau, Inc.*, 375 U.S. 180, 191 (1963); 17 C.F.R. § 242.611(b)(8); FINRA Rule 5310.

The Commission's "fix" would also exacerbate the risk that the market will move further while orders are routed to IEX first and intentionally held back from other exchanges. IEX did not provide any estimate of the costs or associated operational risks for market participants to attempt this purported workaround.

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[13] Numerous commenters expressed similar concerns regarding the Proposal's discriminatory effect on ordinary investors. (*See* Doc. 10 at 3 ("institutional and retail investors sending a portion of a larger order to IEX are likely to experience increased quote fading and declining fill rates"); Doc. 12 at 2 ("the proposed rule change could, in fact, lead to meaningful quote fading and that some IEX liquidity could become 'illusory'"); Doc. 41 at 5 ("IEX would purposefully fade quotes to the express advantage of liquidity providers who use the D-Limit order type and to the express disadvantage of both liquidity seekers and liquidity providers who do not use the D-Limit order type.").)

Moreover, liquidity takers will not know if a particular order displayed on IEX is a regular limit order or a D-limit order, so they would not know whether strategies to account for possible repricing are warranted. The Commission considered none of this. Nor did the Commission acknowledge the perversity inherent in its attempt to justify IEX's price discrimination against liquidity takers by arguing that IEX should be *prioritized* in routing strategies to diminish the harms it chose to inflict.

2. *The Commission Failed To Critically Analyze The Proposal's Burdens on Competition*

It is undisputed that the Proposal confers competitive advantages on liquidity providers over liquidity takers and on IEX itself. IEX touts this tilted playing field as a feature, not a defect, of the Proposal. Overall liquidity will be improved, IEX claimed, because market participants will be "incentivized" to post liquidity on IEX. The Commission did not critically analyze IEX's self-serving speculation.

Instead, the Commission merely referenced select commenters' anecdotal reports that they would be more likely to post liquidity on IEX under the Proposal. (Doc. 5 at 51.) That is hardly proof of a competitive *benefit* to the market, because it demonstrates only that the D-Limit order is skewed in favor of liquidity providers on IEX. Any serious analysis would also have to account for the costs of subsidizing liquidity providers at the expense of liquidity takers, and the effects on liquidity providers at other exchanges. *See Susquehanna*, 866 F.3d at 449-50; *NetCoalition*, 615 F.3d at 540-42.

Petitioner provided such analysis, including research evaluating the effect of an asymmetric speedbump implemented in Canada that provided liquidity providers with a similar advantage. (*See* Doc. 45 at 6 (citing Haoming Chen *et al.*, "The value of a Millisecond: Harnessing Information in Fast, Fragmented Markets," (Nov. 18, 2017) at 15, 65 (Figure 4), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2860359).) That study concluded that asymmetric speedbumps served to increase profitability for liquidity providers but offered no benefit to the broader market in the form of more favorable prices. (*Id.*) The Commission did not address this research or make any findings challenging its conclusions.

The Proposal further burdens competition because it allows IEX "to reprice displayed quotes more quickly than any other market participant, disadvantaging liquidity providers not using the 'Discretionary Limit' order type.'" (Doc. 10 at 6.) As another commenter argued, "[e]xchanges should not have the ability to make investment pricing decisions such as pricing orders using price predictions" because such "competition will not be on fair terms as exchanges have inherently better access to the matching engine." (Doc. 13 at 2-3.)

The Commission responded with perfunctory statements that the Proposal "seeks to better balance the interests of liquidity providers and long-term investors seeking liquidity with those of short-term investors utilizing latency arbitrage strategies." (Doc. 5 at 51.) The Commission thus acknowledged that the Proposal

was selecting winners (liquidity providers) and losers (liquidity takers), but failed to articulate how liquidity-taking long-term investors would not be harmed. (Doc. 5 at 48, 51.) But the Commission made no findings as to why the former were deserving of such a significant advantage over the latter, or how that desired balance would be achieved. This conclusory approach does not allow the public or this Court to identify the "major issues of policy [that] were ventilated by the [rulemaking] and why the agency reacted to them as it did." *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 n.58 (D.C. Cir. 1977). Accordingly, this Court should not "defer to the agency's conclusory or unsupported suppositions." *McDonnell Douglas Corp. v. U.S. Dep't of the Air Force*, 375 F.3d 1182, 1187 (D.C. Cir. 2004).

3. *The Commission Ignored The Risks of Widespread Adoption*

Even as the Commission asserted that the D-Limit Proposal would not unfairly discriminate or harm competition, the Commission gave zero consideration to the consequences of additional exchanges adopting a similar order type. Numerous commenters raised this concern, recognizing that liquidity takers could face widespread quote fading throughout the market. In response, the Commission offered only a footnoted promise to "carefully analyze" such future proposals, as if reaching a different conclusion on an identical proposal would be permissible. (Doc. 5 at 34 n.114.)

* * *

The Commission was required to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43 (quotation marks omitted); *see also Chamber of Commerce v.*, 412 F.3d at 140. Ignoring commenters' concerns, misconstruing and disregarding the data in the record, failing to conduct its own analysis, and relying on the prospect of an unexplained and unworkable potential workaround does not satisfy this standard.

II. The Approval Order Is Arbitrary and Capricious Given The Commission's Rejection Of A Substantially Identical Proposal.

"[W]hen departing from precedents or practices, an agency must offer a reason to distinguish them or explain its apparent rejection of their approach." *Phys. for Soc. Resp. v. Wheeler*, 956 F.3d 634, 644 (D.C. Cir. 2020); *see also Nat'l Lifeline Assoc. v. FCC*, 921 F.3d 1102, 1111 (D.C. Cir. 2019) ("A reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by [the] prior policy."). Despite rejecting the substantially identical CboeEDGA Proposal just months earlier, the Commission failed to "display awareness that it [was] changing its position" regarding asymmetric speedbumps or "show that there are good reasons for the new policy." *Am. Wild Horse Preservation Campaign v. Perdue*, 873 F.3d 914, 928 (D.C. Cir. 2017).

A. The Commission Failed to Distinguish The Central, Shared Feature Of The IEX And CboeEDGA Proposals

Despite numerous comments explaining that the IEX Proposal was materially indistinguishable from the CboeEDGA Proposal with respect to the discriminatory effect on liquidity takers, the Commission announced that "[t]he two proposals differ substantially" and thus warranted different conclusions. (Doc. 5 at 47.) The Commission's proffered distinctions do not withstand scrutiny.

The Commission first observed that "IEX, unlike CboeEDGA, presented substantial evidence of latency arbitrage occurring on its market and has narrowly tailored D-Limit orders to specifically protect against it." (Doc. 5 at 47.) As demonstrated above, however, IEX and CboeEDGA made similar conclusory statements regarding the theoretical potential for latency arbitrage. However, even if the Commission reasonably concluded that IEX demonstrated the existence of latency arbitrage, that would not justify reaching a different conclusion regarding whether there is discrimination against liquidity takers. The Commission's statement that IEX's D-Limit order is more "narrowly tailored" than its CboeEDGA counterpart is simply incorrect—both proposals apply to all liquidity-taking orders during moments of price transition and therefore broadly discriminate against liquidity takers.

Second, the Commission claimed that "CboeEDGA did not address the impact on relatively slower liquidity providers, who might be unable to cancel or modify

their quotes." (Doc. 5 at 47.) But that suggests only that the Commission believed the CboeEDGA Proposal *also* discriminated against certain liquidity providers. It does not explain how the Commission could reach different conclusions as to whether the proposals discriminate against liquidity takers.

Third, and most puzzling of all, the Commission stated that "CboeEDGA did not 'provide[] specific analysis or demonstrate[] that the proposed rule change would not permit unfair discrimination against liquidity taking orders that are not related to latency arbitrage as they would be treated in the same manner as orders engaged in latency arbitrage.'" (Doc. 5 at 48.) As noted above, the IEX Proposal is absolutely identical in this critical respect. Both proposals apply to all liquidity-taking orders during moments of price transition, inflicting the same harm on market participants as on those engaged in purported latency arbitrage. (*See* Doc. 42 at 2.)

B. <u>The Commission Departed From Its Prior Reasoning And Failed To Adequately Explain The Departure</u>

In addition to reaching opposite conclusions regarding discrimination against liquidity takers, the two decisions rely on contradictory reasoning. For example, the Commission criticized the CboeEDGA Proposal for failing to explain "why providing a benefit without a corresponding obligation . . . to liquidity providers is consistent with the Act when the proposed rule permits discrimination against liquidity takers." (CboeEDGA Disapproval Order at 36-37). In contrast, the Commission lauded the IEX Proposal's benefits to "any" liquidity provider (Doc. 5

at 46 n.152), but did not suggest "a corresponding obligation" was warranted. *See Nat'l Lifeline Assoc.*, 921 F.3d at 1111 (requiring "reasoned explanation" for "disregarding facts and circumstances that underlay or were engendered by the prior policy").

Similarly, proponents of the CboeEDGA Proposal argued that any discrimination against liquidity takers was not *unfair*, because liquidity takers could adjust their trading strategies to route to CboeEDGA first. (CboeEDGA Disapproval Order at 37, 39-40 & n.176.) The Commission rejected that argument: "a market participant's ability to adapt its business model or alter its trading strategies in response to this proposed rule does not, by itself, demonstrate that the proposal would not permit unfair discrimination." (*Id.* at 37.) The IEX Approval Order reached the exact opposite conclusion, declaring that market participants can simply "'account[]' for IEX's de minimis speed bump when routing orders." (Doc. 5 at 15.) The Commission did not acknowledge its abrupt about-face regarding the responsibility and supposed "commonplace ability" of liquidity takers to "account" for asymmetric speedbumps. (*Id.* at 13.). *See Dep't of Homeland Sec. v. Regents of the Univ. of Ca.*, 140 S. Ct. 1891, 1905 (2020); *Nat'l Lifeline Assoc.*, 921 F.3d at 1111.

III. The Commission's Conclusion That D-Limit Orders Qualify As "Protected Quotations" Is Arbitrary And Capricious.

The explicit goal of IEX's Proposal is to "incentivize" liquidity providers to post their orders on IEX. (Doc. 5 at 19.) The D-Limit order creates that incentive by giving liquidity providers economic advantages in circumstances where market prices are changing, to the detriment of liquidity takers. But tilting the playing field in favor of liquidity providers is not, by itself, sufficient to attract the order flow that IEX seeks. IEX must also ensure that liquidity takers' orders come to IEX—which is not a minor concern because the liquidity providers' "incentive" comes right out of liquidity takers' pockets. Accordingly, a crucial component of IEX's business strategy is arguing that D-Limit orders qualify as "protected quotations" under Rule 611, which effectively requires that liquidity takers' orders will flow to IEX.

Numerous commenters questioned whether D-Limit orders would qualify as protected quotations under Rule 611. (*See, e.g.*, Doc. 11 at 9; Doc. 20 at 3; Doc. 42 at 2-3; Doc. 45 at 12-14; 17 C.F.R. § 242.611(a)(1).) In particular, commenters argued that a D-Limit order should not receive protection because, when the CQI is on, the liquidity provider's quote would be repriced while the liquidity taker's order is still navigating the Speedbump. The Commission dismissed those arguments in two sentences, stating that "[t]he Commission previously determined that IEX can maintain a protected quotation" and "IEX is not introducing any new delay or modifying its speed bump." (Doc. 5 at 37.) The Commission's terse disposition of

this consequential issue is the model of unreasoned decisionmaking. It is also irreconcilable with the governing regulations and the facts.

A. The Commission Failed To Engage In Reasoned Decisionmaking

When initially approving IEX as an exchange in 2016, and again when rejecting the CboeEDGA Proposal in early 2020, the Commission noted that "[it] would be concerned about access delays that were imposed only on certain market participants." (CboeEDGA Disapproval Order at 11; Commission Interpretation Regarding Automated Quotations Under Regulation NMS, 81 Fed. Reg. 40785 (June 23, 2016).) Here, when confronted with the asymmetric delay and repricing resulting from the IEX Proposal, the Commission summarily adopted IEX's view that the Commission had already decided the issue.

Not so. When approving IEX to operate as an exchange, the Commission expressly declined to answer whether the repricing of a *displayed* order would prohibit classification as a "protected quotation." The Commission's reason for avoiding the issue was that "IEX will only reprice pegged orders, which are non-displayed." (IEX Exchange Approval Order at 41,156 n.216.)

Accordingly, the Commission did not decide in 2016 whether application of the CQI and the Speedbump to asymmetrically reprice *displayed* orders would be consistent with the definition of a "protected quotation." Rather, the Commission's approval of IEX determined only that it was an "automated trading center" *capable*

of displaying protected quotations, and that displayed quotes *that were not subject to repricing* by the CQI could be "protected quotations." (*See* IEX Exchange Approval Order at 41,162 n.274 (emphasis added); 17 C.F.R. § 242.600(b)(4) (automated quotation) and (5) (automated trading center).)

For similar reasons, the Commission's claim that the D-Limit order imposes no "added" delay disregards the agency's duty to closely scrutinize asymmetrically applied delays. (*Compare* Doc. 5 at 37, *with* CboeEDGA Disapproval Order at 11.) Although the nominal length of the Speedbump is not changed, the Proposal effectively exempts D-Limit orders from the Speedbump altogether, thus transforming the Speedbump into an obstacle for liquidity-taking orders only. Symmetric treatment for displayed orders was an implicit (but foundational) assumption of the Commission's original approval of IEX in 2016.

The Commission's conclusion that it already decided the question in 2016 is thus revisionist, not originalist, and the Commission accordingly provided no actual explanation for why D-Limit orders qualify as "protected quotations." Nor did it respond to numerous comments arguing that the D-Limit order cannot be a protected quotation, including those that quoted IEX's founder recognizing that application of the CQI and the Speedbump to reprice *displayed* liquidity would undermine the very concept of protected quotations. (Doc. 11 at 12 ("[W]ithin the context of displayed liquidity—seeing something and having it fade on you—we've been very cognizant

that's what started this whole journey for us. We don't want to contribute to that.") (quoting Matt Levine, *Beyond Flash Boys: Matt Levine Interviews IEX's Brad Katsuyama*, Bloomberg, Oct. 12, 2016, https://www.bloomberg.com/news/articles/2016-10-12/beyond-flash-boys-matt-levine-interviews-iex-s-brad-katsuyama); Doc. 45 12 n.51 (citing Letter from Sophia Lee, General Counsel, IEX (Nov. 13, 2015) at 8 ("The PSX proposal . . . would have changed the accessibility of a protected quote by altering the relative speeds of quotation makers and takers [emphasis added].") and Letter from Sophia Lee, General Counsel, IEX (Nov. 23, 2015) at 5 ("PSX's proposal was rightfully withdrawn because its 'speed bump' was applied only to a subset of orders and actually may have harmed the accessibility of its quotations.").) In short, the Commission broke its promise—and, more importantly, its statutory obligation—to closely scrutinize asymmetric delays, and "effectively abdicated [its] responsibility" in favor of the commercial interests of IEX. *See Susquehanna*, 866 F.3d at 446-51.

B. The Commission's Interpretation Contravenes Regulation NMS And Interpretive Guidance

Even if the Commission's two-sentence statement constitutes a reasoned explanation for expanding protected-quotation status to D-Limit orders, that determination must be vacated. The D-Limit order cannot qualify as a protected quotation unless it is capable of execution "immediately and automatically." Under any reasonable reading of the governing regulation and accompanying guidance, it

is not. *See Kisor v. Wilkie*, 139 S. Ct. 2400, 2415 (June 26, 2019) (plurality opinion) (where "there is only one reasonable construction of a regulation . . . a court has no business deferring to any other reading").

Rule 600(b)(4) requires, among other things, that a "protected quotation" must be capable of execution "immediately and automatically against an incoming immediate-or-cancel order." 17 C.F.R. § 242.600(b)(4)(ii). The D-Limit order does not meet that requirement. Instead, when the CQI is on, incoming liquidity-taking orders are intentionally delayed while displayed D-Limit orders are repriced to render them inaccessible at the original displayed price.

The Commission's interpretive guidance confirms as much. The Commission has deemed certain *symmetrically* delayed quotations as nonetheless "automated" where the delay is "so short as to not frustrate the purposes of Rule 611 by impairing fair and efficient access to an exchange's quotations." (Commission Interpretation Regarding Automated Quotations Under Regulation NMS, 81 Fed. Reg. 40785 (June 23, 2016); *see also* Regulation NMS, Exchange Act Rel. No. 51,808 (June 9, 2005), 70 Fed. Reg. 37,496 at 37,520 (June 29, 2005) (noting that "[f]or a trading center to qualify as entitled to display any protected quotations, the public in general must have fair and efficient access to a trading center's quotations").) The D-Limit order, however, institutionalizes quote fading, impeding access to a substantial percentage of displayed volume each day. (*See* Doc. 1 at 72,001-02 (IEX receiving

33.7% of marketable orders and executing 24% of displayed volume while CQI is on); Doc. 1 at 72,003 ("D-Limit orders may not be accessible to other market participants" when the CQI is on).).

Once the CQI triggers, a D-Limit order is immediately inaccessible at the displayed price and remains so thereafter. (*See* Doc. 1 at 72,000, 72,003.) The liquidity taker's only option—if the trade can be completed at all—is to execute at a worse price. That result flouts the core objective of providing "fair and efficient access" to quotations. *See Am. Bird Conservancy, Inc. v. F.C.C.*, 516 F.3d 1027, 1034 (D.C. Cir. 2008) (vacating agency order that failed to follow own regulations).

CONCLUSION

For the foregoing reasons, the Petition for Review should be granted, the Commission's order vacated, and the matter remanded to the Commission.

Dated: February 2, 2021

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing Brief in Support of Petition for Review was served on all counsel of record in Case Number 20-1424 through the electronic filing system (CM/ECF) of the U.S. Court of Appeals for the District of Columbia Circuit.

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CERTIFICATE OF COMPLIANCE

Pursuant to FED. R. APP. P. 32(g)(1), I certify the following:

This brief complies with the type-volume limitation of Rule 32(a)(7)(B) of the Federal Rules of Appellate Procedure because this brief contains 12,998 words, excluding the parts of the brief exempted by Rule 32(f) of the Federal Rules of Appellate Procedure and Circuit Rule 32(a)(1).

This brief complies with the typeface requirements of Rule 32(a)(5) of the Federal Rules of Appellate Procedure and the type style requirements of Rule 32(a)(6) of the Federal Rules of Appellate Procedure because this brief has been prepared in a proportionately spaced typeface using Microsoft Word in 14-point Times New Roman font.

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ADDENDUM OF STATUTES AND REGULATIONS

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5 U.S.C. § 706(2)(A), (E)

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

> (2) hold unlawful and set aside agency action, findings, and conclusions found to be--
>
> > (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; or
> >
> > [. . .]
> >
> > (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute[.]

15 U.S.C. § 78f(b)(5), (8)

(b) Determination by Commission requisite to registration of applicant as a national securities exchange

An exchange shall not be registered as a national securities exchange unless the Commission determines that--

> (5) The rules of the exchange are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, or to regulate by virtue of any authority conferred by this chapter matters not related to the purposes of this chapter or the administration of the exchange.
>
> [. . .]
>
> (8) The rules of the exchange do not impose any burden on competition not necessary or appropriate in furtherance of the purposes of this chapter.

15 U.S.C. § 78s(b)(2)

(b) **Proposed rule changes; notice; proceedings**

(2) Approval process

(A) Approval process established

(i) In general

Except as provided in clause (ii), not later than 45 days after the date of publication of a proposed rule change under paragraph (1), the Commission shall—

(I) by order, approve or disapprove the proposed rule change; or

(II) institute proceedings under subparagraph (B) to determine whether the proposed rule change should be disapproved.

(ii) Extension of time period

The Commission may extend the period established under clause (i) by not more than an additional 45 days, if—

(I) the Commission determines that a longer period is appropriate and publishes the reasons for such determination; or

(II) the self-regulatory organization that filed the proposed rule change consents to the longer period.

[. . .]

(C) Standards for approval and disapproval

(i) Approval

The Commission shall approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of this chapter and the rules and regulations issued under this chapter that are applicable to such organization.

15 U.S.C. § 78y(a)(1), (4)

(a) Final Commission orders; persons aggrieved; petition; record; findings; affirmance, modification, enforcement, or setting aside of orders; remand to adduce additional evidence

> (1) A person aggrieved by a final order of the Commission entered pursuant to this chapter may obtain review of the order in the United States Court of Appeals for the circuit in which he resides or has his principal place of business, or for the District of Columbia Circuit, by filing in such court, within sixty days after the entry of the order, a written petition requesting that the order be modified or set aside in whole or in part.
>
> [. . .]
>
> (4) The findings of the Commission as to the facts, if supported by substantial evidence, are conclusive.

17 C.F.R. § 242.600(b)(4)(ii, v), (43), (61)

(b) For purposes of Regulation NMS (§§ 242.600 through 242.612), the following definitions shall apply:

> (4) Automated quotation means a quotation displayed by a trading center that:
>
> > (ii) Immediately and automatically executes an order marked as immediate-or-cancel against the displayed quotation up to its full size;
> >
> > [. . .]
> >
> > (v) Immediately and automatically displays information that updates the displayed quotation to reflect any change to its material terms.
> >
> > [. . .]
>
> (43) National best bid and national best offer means, with respect to quotations for an NMS security, the best bid and best offer for such security that are calculated and disseminated on a current and continuing basis by a plan processor pursuant to an effective national market system plan; provided, that in the event two or more market centers transmit to the plan processor pursuant to such plan identical bids or offers for an NMS security, the best bid or best offer (as the case may be) shall be determined by ranking all such identical bids or offers (as the case may be) first by size (giving the

highest ranking to the bid or offer associated with the largest size), and then by time (giving the highest ranking to the bid or offer received first in time).

[. . .]

(61) Protected bid or protected offer means a quotation in an NMS stock that:

(i) Is displayed by an automated trading center;

(ii) Is disseminated pursuant to an effective national market system plan; and

(iii) Is an automated quotation that is the best bid or best offer of a national securities exchange, the best bid or best offer of The Nasdaq Stock Market, Inc., or the best bid or best offer of a national securities association other than the best bid or best offer of The Nasdaq Stock Market, Inc.

17 C.F.R § 242.611(a)(1), (b)(8)

(a) Reasonable policies and procedures.

(1) A trading center shall establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs on that trading center of protected quotations in NMS stocks that do not fall within an exception set forth in paragraph (b) of this section and, if relying on such an exception, that are reasonably designed to assure compliance with the terms of the exception.

(2) A trading center shall regularly surveil to ascertain the effectiveness of the policies and procedures required by paragraph (a)(1) of this section and shall take prompt action to remedy deficiencies in such policies and procedures.

(b) Exceptions.

[. . .]

(8) The trading center displaying the protected quotation that was traded through had displayed, within one second prior to execution of the transaction that constituted the trade-through, a best bid or best offer, as applicable, for the NMS stock with a price that was equal or inferior to the price of the trade-through transaction.